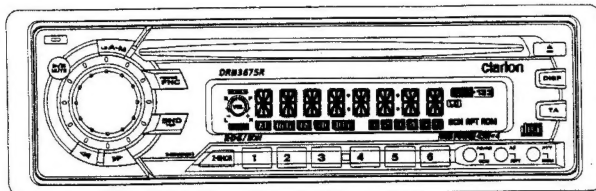
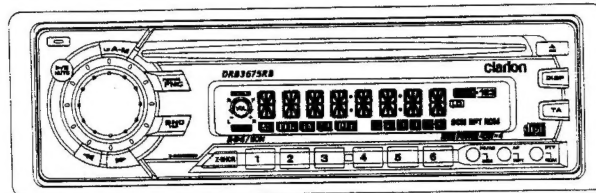


Service Manual



(DRB3675R)



(DRB3675RB)

RDS-EONFM/MW/LW

Radio CD Combination

Model **DRB3675R**
(PE-2327E-A)

Model **DRB3675RB**
(PE-2327E-B)

SPECIFICATIONS

Radio section

Tuning system: PLL synthesizer tuner

Receiving frequencies:

FM : 87.5 to 108 MHz
(0.05 MHz steps)

MW : 531 to 1602 kHz
(9 kHz steps)

LW : 153 to 279 kHz
(3 kHz steps)

CD player section

System: Compact disc digital audio system

Frequency response: 10 Hz to 20 kHz (± 1 dB)

Signal to noise ratio: 96 dB (1 kHz) IHF-A

Dynamic Range: 95 dB (1 kHz)

Distortion: 0.01%

General

Max. power output: 45 W \times 4

Power supply voltage: 14.4 V DC (10.8 V to 15.6 V allowable), negative ground

Power consumption: Less than 15 A

Speaker impedance: 4 Ω (4 Ω to 8 Ω allowable)

Auto antenna rated current:

500 mA or less

Weight: Main unit 1.7 kg

Dimensions: Main unit
178(W) \times 50(H) \times 155(D)mm

※Short-circuiting the power antenna terminal or using a power antenna with a current exceeding the rated current can damage internal circuits. Always use with the rated current.

※Specifications and design are subject to change without notice for further improvement.

NOTE

※We cannot supply PWB with component parts in principle. When a circuit on PWB has failure, please repair it by component parts base. Parts which are not mentioned in service manual are not supplied.

COMPONENTS

PE-2327E-A/PE-2327E-B

Main unit		1
Mounting bracket	300-7742-00	1
Escutcheon(OUT-ES)	370-9006-35	1
DCP case	335-5734-30	1
Part's bag		
Removal key	331-2497-00	2
Screw	716-0726-01	1
Spacer	345-3653-20	1
A-lead	850-6681-50	1

FEATURES

- 1.RDS-Pro Receiver with EON, CT and PTY Function
- 2.CD-Deck with 1-Bit D/A Converter and 8-Times Oversampling
- 3.Fully Detachable Control Panel with Multi-Colour LC-Display (PE-2327E-A Only)
- 4.Fully Detachable Control Panel with Blue-Colour LC-Display (PE-2327E-B Only)
- 5.High Power 4 \times 45W Max./ 2-Channel RCA Line Level Output

■ To engineers in charge of repair or inspection of our products.

Before repair or inspection, make sure to follow the instructions so that customers and Engineers in charge of repair or inspection can avoid suffering any risk or injury.

1. Use specified parts.

The system uses parts with special safety features against fire and voltage. Use only parts with equivalent characteristics when replacing them.

The use of unspecified parts shall be regarded as remodeling for which we shall not be liable. The onus of product liability (PL) shall not be our responsibility in cases where an accident or failure is as a result of unspecified parts being used.

2. Place the parts and wiring back in their original positions after replacement or re-wiring.

For proper circuit construction, use of insulation tubes, bonding, gaps to PWB, etc., is involved. The wiring connection and routing to the PWB are specially planned using clamps to keep away from heated and high voltage parts. Ensure that they are placed back in their original positions after repair or inspection.

If extended damage is caused due to negligence during repair, the legal responsibility shall be with the repairing company.

3. Check for safety after repair.

Check that the screws, parts and wires are put back securely in their original position after repair. Ensure for safety reasons there is no possibility of secondary problems around the repaired spots.

If extended damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

4. Caution in removal and making wiring connection to the parts for the automobile.

Disconnect the battery terminal after turning the ignition key off. If wrong wiring connections are made with the battery connected, a short circuit and/or fire may occur. If extensive damage is caused due to negligence of repair, the legal responsibility shall be with the repairing company.

5. Cautions regarding chips.

Do not reuse removed chips even when no abnormality is observed in their appearance. Always replace them with new ones. (The chip parts include resistors, capacitors, diodes, transistors, etc). The negative pole of tantalum capacitors is highly susceptible to heat, so use special care when replacing them and check the operation afterwards.

6. Cautions in handling flexible PWB

Before working with a soldering iron, make sure that the iron tip temperature is around 270°C. Take care not to apply the iron tip repeatedly (more than three times) to the same patterns. Also take care not to apply the tip with force.

7. Turn the unit OFF during disassembly and parts replacement. Recheck all work before you apply power to the unit.

8. Cautions in checking that the optical pickup lights up. The laser is focused on the disc reflection surface through the lens of the optical pickup. When checking that the laser optical diode lights up, keep your eyes more than 30cms away from the lens. Prolonged viewing of the laser within 30cms may damage your eyesight.

9. Cautions in handling the optical pickup

The laser diode of the optical pickup can be damaged by electrostatic charge caused by your clothes and body. Make sure to avoid electrostatic charges on your clothes or body, or discharge static electricity before handling the optical pickup.

9-1. Laser diode

The laser diode terminals are shorted for transportation in order to prevent electrostatic damage. After replacement, open the shorted circuit. When removing the pickup from the mechanism, short the terminals by soldering them to prevent this damage.

9-2. Actuator

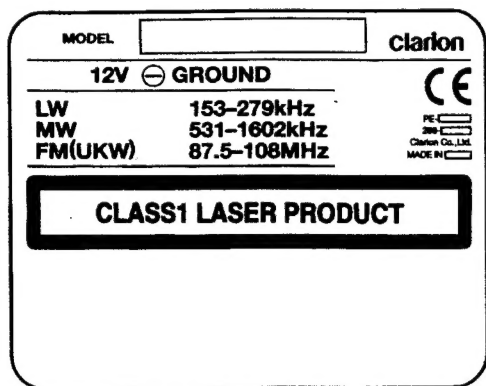
The actuator has a powerful magnetic circuit. If a magnetic material is put close to it, its characteristics will change. Ensure that no foreign substances enter through the ventilation slots in the cover.

9-3. Cleaning the lens

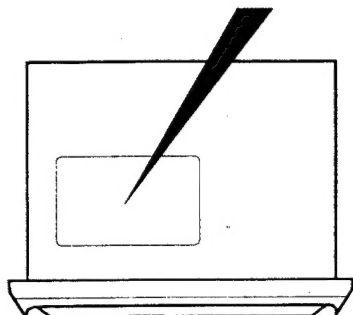
Dust on the optical lens affects performance. To clean the lens, apply a small amount of isopropyl alcohol to lens paper and wipe the lens gently.

■ CAUTIONS

This appliance contains a laser system and is classified as a "CLASS 1 LASER PRODUCT". To use this model properly, read this Owner's Manual carefully and keep this manual for your future reference. In case of any trouble with this player, please contact your nearest "AUTHORIZED service station". To prevent direct exposure to the laser beam, do not try to open the enclosure.



Bottom view of Main Unit



■ NOTES OF ISO CONNECTOR

1. For VW and Audi vehicles, change the position of fuse installation as shown on the diagram. (Figure 1)

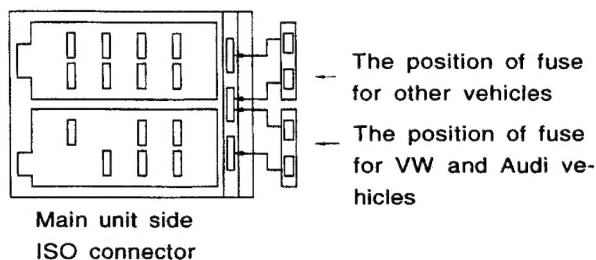


Figure 1

2. The lead include with the unit must be connected to the specified position of the vehicle's ISO connector in order to use the "triggered audio mute for cellular telephones" function. (Figure 2)

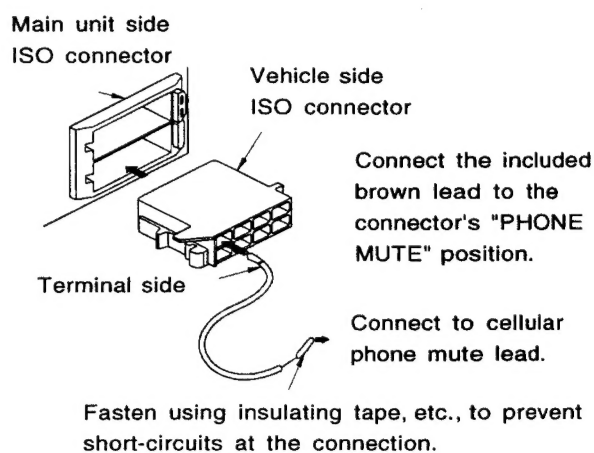
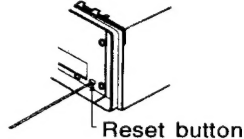


Figure 2

■ TROUBLESHOOTING

Problem	Cause	Measure
Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage as the old fuse.
	Incorrect wiring.	Read the attached "Installation/Wire Connection Guide" once again and wire properly.
Compact disc cannot be loaded.	Another compact disc is already loaded.	Eject the compact disc before loading the new one.
Sound skips or is noisy.	Compact disc is dirty.	Clean the compact disc with a soft cloth.
	Compact disc is heavily scratched or warped.	Replace with a compact disc with no scratches.
Sound is bad directly after power is turned on.	Water droplets may form on the internal lens when the car is parked in a humid place.	Let dry for about 1 hour with the power on.
Nothing happens when buttons are pressed. Display is not accurate.	The microprocessor has malfunctioned due to noise, etc.	Turn off the power, then press the Release button and remove the DCP. Press the reset button for about 2 seconds with a thin rod. 
	DCP or main unit connectors are dirty.	Wipe the dirt off with a soft cloth moistened with cleaning alcohol.

■ ERROR DISPLAYS

If an error occurs, one of the following displays is displayed.

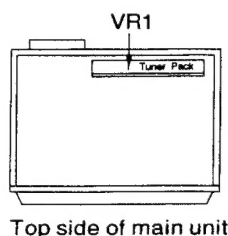
Take the measures described below to eliminate the problem.

Error Display	Cause	Measure
CD ER2	A CD is caught inside the CD deck and is not ejected.	This is a failure of CD deck's mechanism and consult your store of purchase.
CD ER3	A CD cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
CD ER6	A CD is loaded upside-down inside the CD deck and does not play.	Eject the disc then reload it properly.

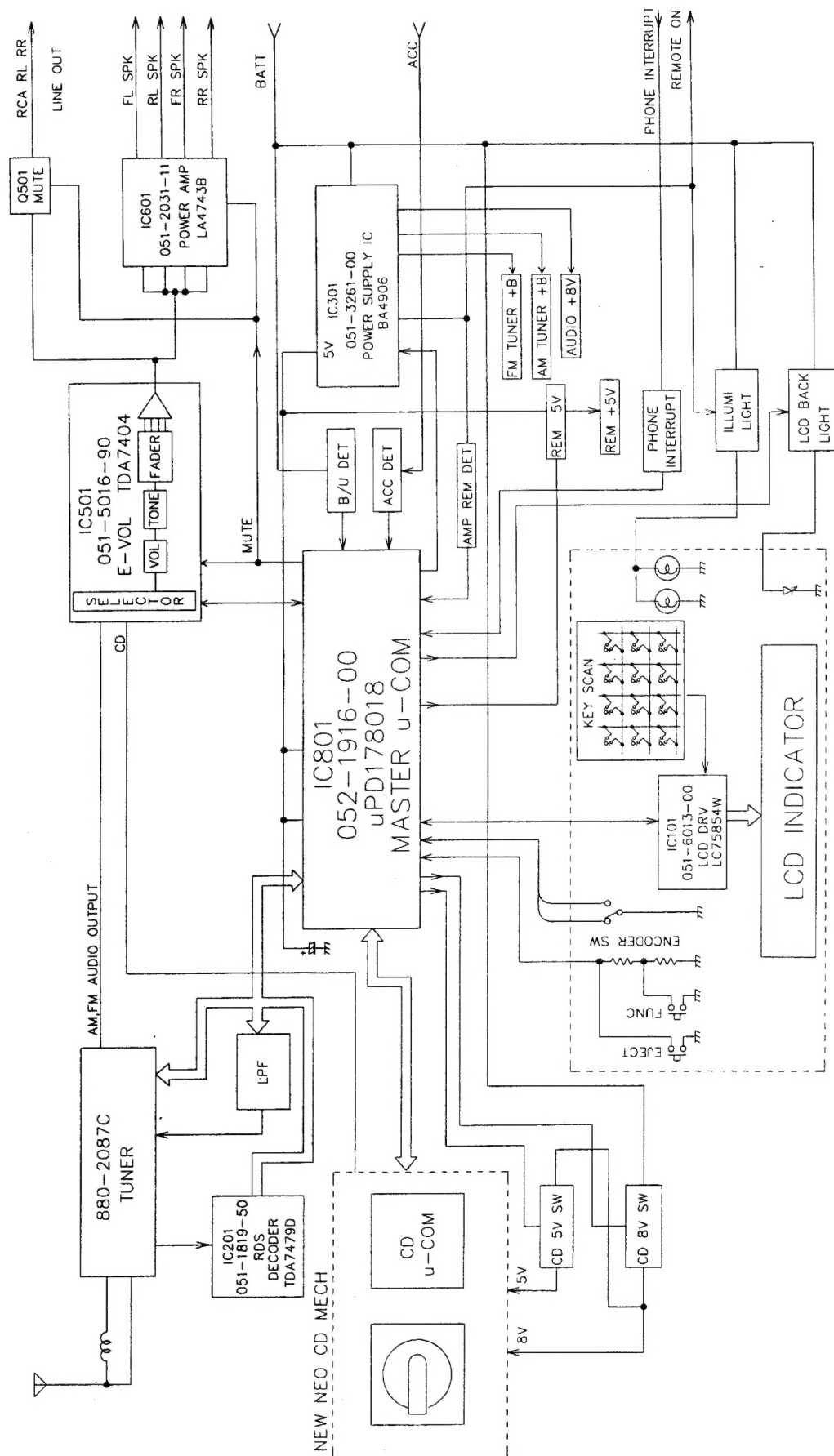
If an error display other than the ones described above appears, press the reset button. If the problem persists, turn off the power and consult your store of purchase.

■ ADJUSTMENTS

Item	Procedure	Measuring instrument
S-meter	1.Input the 98.1MHz/30dB μ (400Hz-MOD 30%)signal. 2.Turn on the power switch. And press the AF button and CH6 button at the same time.(TEST MODE) 3.Adjust the reading of LCD indicator to [30----00] (3.0V \pm 0.2V)by VR1.	SG



■ BLOCK DIAGRAM



EXPLANATION OF IC:

■ μ PD178018AGC-545-3B9 052-1916-00 MASTER MICRO COMPUTER

1. Outward Form : 80 pins QFP

2. Terminal Description

pin 1 : KEY_A/D : I : FUNC/EJECT/DCP detection terminal for A/D converter

pin 2 : RDS S_METER : I : RDS S_METER detection terminal for A/D converter

pin 3 : RDS_NOISE : I : RDS NOISE detection terminal for A/D converter

pin 4 : VOL CW : I : Use for rolling volume

pin 5 : VOL CCW : I : Use for rolling volume

pin 6 : NOISE_DISCHG : O : Noise is off

pin 7 : LCD_SI : I : Serial data communication line to LCD Control IC

pin 8 : LCD_SO : O : Serial data communication line to LCD Control IC

pin 9 : LCD_SCK : O : Serial data communication line to LCD Control IC

pin 10 : LCD_CE : O : Serial data communication line to LCD Control IC

pin 11 : C-BUS SRQ : I : "C-BUS" Serial data communication line

pin 12 : C-BUS_SI : I : "C-BUS" Serial data communication line

pin 13 : C-BUS_SO : O : "C-BUS" Serial data communication line

pin 14 : C-BUS_SCK : O : "C-BUS" Serial data communication line

pin 15 : NC : O : NC

pin 16 : SYS_MUTE : O : Output mute. While it is "LOW", mute is "ON"

pin 17 : REM + 5 : O : REM 5V power supply control terminal

pin 18 : STAND BY : O : Power supply IC control terminal

pin 19 : E_VOL CLK : O : E_VOL use

pin 20 : E_VOL DATA : O : E_VOL use

pin 21 : GND : - : GND

pin 22 : VDD : - : VDD

pin 23 : MODE1 FM/AM : O : While "HI"=FM and "LO"=AM, power supply is "ON"

pin 24 : MODE2 ANT : O : While "HI"=ANT, power supply is "ON"

pin 25 : MUTE SPEED : O : During RDS follow-up motion, mute speed at "LO"; usually it is at "HI"

pin 26 : IF_REQ : O : During seeking, it is at "HI"; while detecting RDS SD, it is at "LO"

pin 27 : ST : O : Usually input "ST" lights at "LO"; always at "HI" during seeking

pin 28 : AM IF CNT : I : AM IF counter

pin 29 : FM IF CNT : I : FM IF counter

pin 30 : VDD : - : VDD

pin 31 : FM OSC : I : FM VCO input terminal

pin 32 : AM OSC : I : AM VCO input terminal

pin 33 : GND : - : GND

pin 34 : AM/FM EO : O : AM/FM PLL VT

pin 35 : AM/FM EO : O : AM/FM PLL VT

pin 36 : GND : - : GND

pin 37 : NC : I : GND

pin 38 : NC : I : GND

pin 39 : SD/ST_IND : I : While AM/FM SD IN/FM ST is "0", "ST" lights

pin 40 : RDS MUTE : O : During RDS follow-up motion, mute is at "HI"; usually it is at "LO"

pin 41 : AM_DX/LO : O : AM DX/LO output terminal, LOCAL is at "HI"

pin 42 : AMP REM_DET : I : While protecting circuit motion, it is at "HI"

pin 43 : SLAVE ON : I : While SLAVE ON, it is at "Lo"

pin 44 : B/L + B : O : 8V power supply control for LCD

pin 45 : NC : O : NC

pin 46 : FM_DX/LO : O : FM DX/LO output terminal, LOCAL is at "HI"

pin 47 : CD_8V REM : O : CD power supply control terminal + 8V

pin 48 : CD_5V REM : O : CD power supply control terminal + 5V

pin 49 : PHONE AUDIO : I : Connected to GND

pin 50 : NC : I : NC

pin 51 : CW : O : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 52 : CCW : O : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 53 : TR_C : I : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 54 : TR_B : I : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 55 : TR_A : I : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 56 : CHU_SW : I : Mechanical photo snesor input terminal. Terminal to detect the disc position in loading status, chucking status and other machine status. With disc, "H" is input. Without disc, "L" is input.

pin 57 : NC : I : NC

pin 58 : CD_RESET : O : CD MECH connects to RESET

pin 59 : CCE : O : CD MECH chip enable

pin 60 : BUCK : O : CD MECH data bus clock

pin 61 : BUS_3 : I/O : CD MECH data bus

pin 62 : BUS_2 : I/O : CD MECH data bus

pin 63 : BUS_1 : I/O : CD MECH data bus

pin 64 : BUS_0 : I/O : CD MECH data bus

pin 65 : L/M : O : LW="HI", MW="LO"

pin 66 : RDS_DATA : I : RDS data input terminal

pin 67 : RDS_CLK : I : RDS clock input terminal

pin 68 : B/U_DET : I : B/U detecting terminal

pin 69 : ACC_JN : I : ACC detecting terminal

pin 70 : REMOCON : I : Remote control

pin 71 : KEY_INT : I : To 1 pin

pin 72 : SBSY : I : Connected to CD MECH

pin 73 : PHONE_INT : I : Phone interrupted

pin 74 : CPU REG : - : 0.047 μ F to GND

pin 75 : GND : - : GND

pin 76 : XOUT : - : X-TAL 4.5MHz

pin 77 : XIN : - : X-TAL 4.5MHz

pin 78 : OSC REG : - : 0.047 μ F to GND

pin 79 : VDD : - : VDD

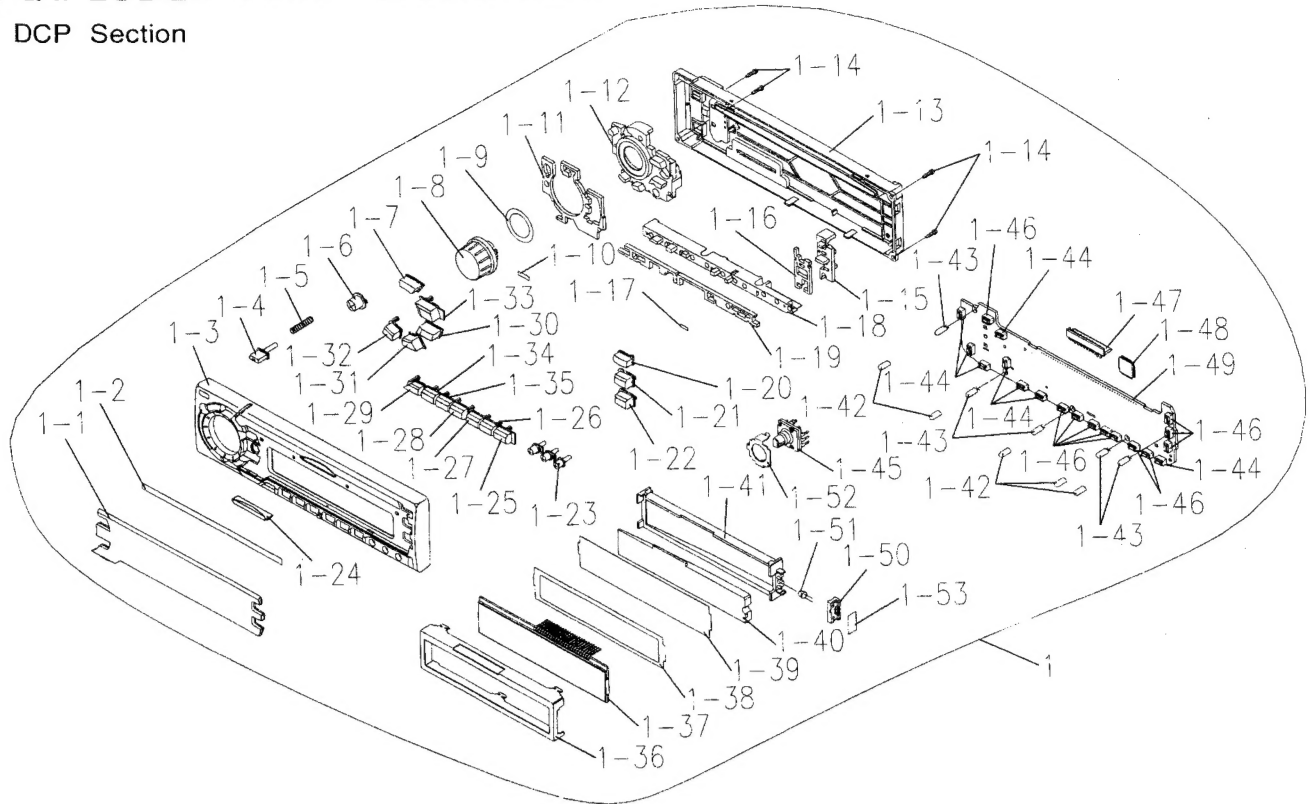
pin 80 : RESET : I : System reset with 22K to 68 pin

CD MECH : LOADING MOTOR CONTROL

PIN No	NAME	LOADING	EJECT	BREAK	STOP
51	MCW	H	L	H	L
52	MCCW	L	H	H	L

EXPLODED VIEW · PARTS LIST:

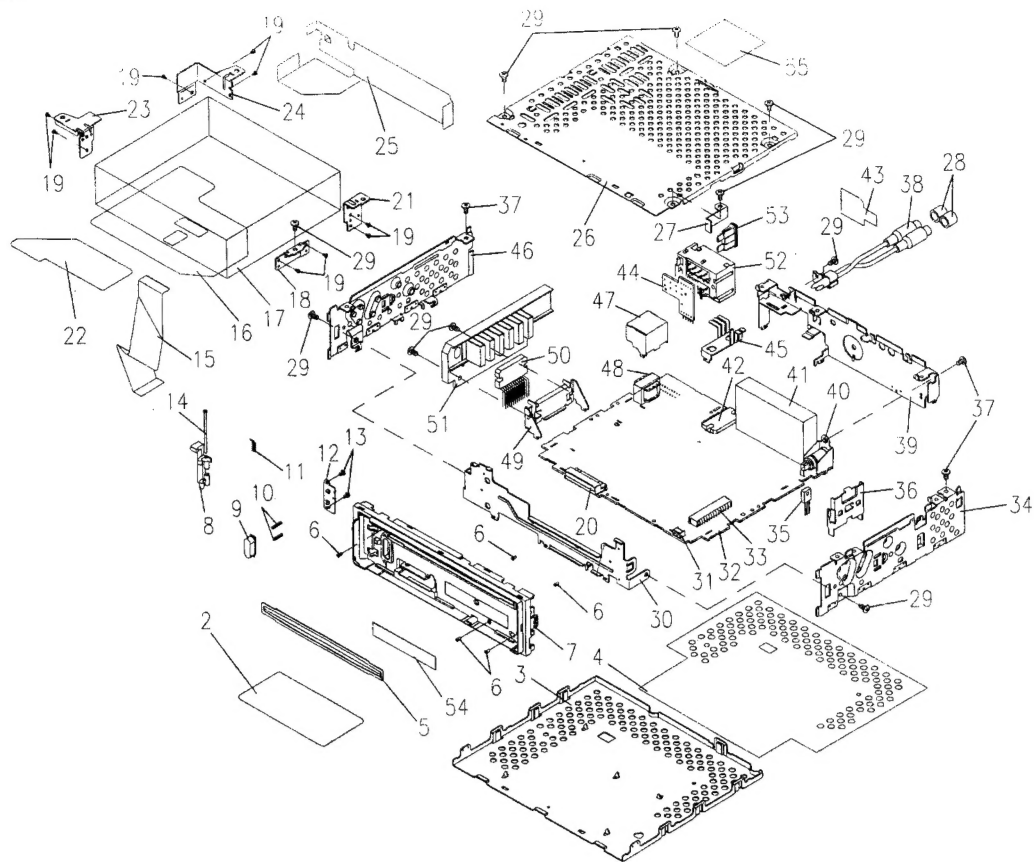
DCP Section



NO.	PARTS NO.	DESCRIPTION	Q'TY
1	DCP-182-700	DCP ASSY(PE-2327E-A)	1
	DCP-188-700	DCP ASSY(PE-2327E-B)	1
1-1	373-0916-06	DIAL-CVR(PE-2327E-A)	1
	373-0916-08	DIAL-CVR(PE-2327E-B)	1
1-2	347-6205-00	DOUBLE FACE	1
1-3	370-5856-03	ESCUTCHEON	1
1-4	382-5665-00	BUTTON	1
1-5	750-6699-00	SPRING	1
1-6	382-5651-00	BUTTON	1
1-7	382-5652-00	BUTTON	1
1-8	380-5467-01	KNOB	1
1-9	347-6206-00	SHADE	1
1-10	347-6193-00	SHADE	1
1-11	345-8406-00	SPONGE	1
1-12	335-6206-00	ILLUMI PART	1
1-13	335-6199-02	REAR-CVR	1
1-14	716-1721-00	P-TIGHT-SCREW	4
1-15	335-6204-00	ILLUMI PART	1
1-16	345-8404-00	SPONGE	1
1-17	347-6192-00	SHADE	1
1-18	335-6205-00	ILLUMI PART	1
1-19	345-8405-00	SPONGE	1
1-20	382-5662-00	BUTTON	1
1-21	382-5661-00	BUTTON	1
1-22	382-5660-01	BUTTON	1
1-23	382-5663-00	BUTTON	1
1-24	335-5921-00	ILLUMI PLATE	1
1-25	382-5659-00	BUTTON	1
1-26	382-5658-00	BUTTON	1
1-27	382-5657-00	BUTTON	1

NO.	PARTS NO.	DESCRIPTION	Q'TY
1-28	382-5656-00	BUTTON	1
1-29	382-5653-00	BUTTON	1
1-30	382-5648-00	BUTTON	1
1-31	382-5649-00	BUTTON	1
1-32	382-5650-00	BUTTON	1
1-33	382-5647-00	BUTTON	1
1-34	382-5654-00	BUTTON	1
1-35	382-5655-00	BUTTON	1
1-36	331-2808-00	LCD-CVR	1
1-37	379-1174-41	INDICATOR(PE-2327E-A)	1
	379-1182-40	INDICATOR(PE-2327E-B)	1
1-38	347-6167-00	SHADE	1
1-39	347-6166-00	FILM	1
1-40	335-6212-00	LCD ILLUMI	1
1-41	335-6208-00	LCD HOLDER	1
1-42	345-4441-37	LAMP CAP(PE-2327E-A)	5
	345-4441-86	LAMP CAP(PE-2327E-B)	5
1-43	017-0444-00	PILOT LAMP	5
1-44	013-6305-50	TACT SWITCH	8
1-45	016-9900-66	VR W/SHAFT	1
1-46	013-6001-50	SWITCH	11
1-47	076-0615-00	PLUG	1
1-48	051-6013-00	IC	1
1-49	039-1614-00	PWB (WITHOUT COMPONENT)	1
1-50	335-6216-00	LED HOLDER	1
1-51	001-7046-00	DIODE(PE-2327E-A)	1
	001-7030-00	DIODE(PE-2327E-B)	1
1-52	331-2814-00	JOG-SW HOLDER	1
1-53	347-6191-00	SHADE	1

Main Section



NO.	PARTS NO.	DESCRIPTION	Q'TY	NO.	PARTS NO.	DESCRIPTION	Q'TY
2	286-9338-00	SETPLATE(PE-2327E-A)	1	30	309-0721-01	FRONT PLATE	1
	286-9394-00	SETPLATE(PE-2327E-B)	1	31	013-6100-00	SWITCH	1
3	304-0460-00	LOWER-CVR	1	32	039-1625-01	PWB (WITHOUT COMPONENT)	1
4	347-5918-00	INSULATOR	1	33	074-0986-26	OUTLET SOCKET	1
5	346-0097-00	LEATHER SHEET	1	34	305-0275-00	SIDE-CVR	1
6	780-2004-01	SCREW	5	35	103-2012-00	TRANSISTOR	1
7	370-5791-03	INNER-ES	1	36	313-1651-20	HEAT SINK	1
8	335-5915-01	HOOK	1	37	714-3006-81	MACHINE SCREW	3
9	382-4078-00	BUTTON	1	38	855-5426-52	RCA PIN CORD	1
10	750-3173-00	SPRING	2	39	307-0627-10	REAR-CVR	1
11	750-3219-00	SPRING	1	40	092-9000-41	ANT RECEPT	1
12	331-2594-00	HOOK PLATE	1	41	880-2087C	TUNER	1
13	716-0778-00	WAVE SCREW	2	42	051-3261-00	IC	1
14	341-1627-00	SHAFT	1	43	347-3701-00	FILM	1
15	816-2391-00	FLAT CABLE	1	44	039-1400-30	PWB (WITHOUT COMPONENT)	1
16	347-5916-02	INSULATOR	1	45	313-1772-00	HEAT SINK	1
17	929-0092-80	CD-MECH-MODULE	1	46	305-0274-00	SIDE-CVR	1
18	331-2492-00	CD-SUB-BRKT	1	47	331-2820-00	SHIELD CASE	1
19	716-0717-10	STEEL SCREW	9	48	009-9006-50	CHOKE	1
20	074-1217-00	OUTLET SOCKET	1	49	331-2255-20	IC HOLDER	1
21	331-2494-00	CD-SUB-BRKT	1	50	051-2031-11	IC	1
22	347-5416-00	INSULATOR	1	51	313-1744-20	HEAT SINK	1
23	331-2491-00	CD-SUB-BRKT	1	52	074-1115-00	OUTLET SOCKET	1
24	331-2493-00	CD-SUB-BRKT	1	53	060-0057-57	AUTO-FUSE	1
25	347-6201-00	INSULATOR	1	54	291-0067-00	STICKER	1
26	303-0472-00	UPPER-CVR	1	55	291-0083-00	STICKER	1
27	331-2744-00	STOPPER	1				
28	345-3799-20	RUBBER PART	2				
29	731-3006-80	TAPTIGHT	10				

■ ELECTRICAL PARTS LIST

Main PWB section (B2)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
IC 201	051-1819-50	TDA7479D	D 602	001-0466-01	S5688G	C 131	182-1063-33	16V 10 μ H
IC 202	051-0350-55	NJM4558M	D 603	001-0466-01	S5688G	C 201	176-8201-00	50V 82PF
IC 301	051-3261-00	BA4906	D 604	001-0466-01	S5688G	C 202	176-4701-00	50V 47PF
IC 501	051-5016-90	TDA7404	D 605	001-0466-01	S5688G	C 203	178-3312-78	50V 330PF
IC 601	051-2031-11	LA4743B	D 606	001-0466-01	S5688G	C 204	183-2253-62	50V 2.2 μ F
IC 801	052-1916-00	μ PD178018	D 607	001-0466-01	S5688G	C 205	183-1073-22	10V 100 μ F
Q 101	108-0669-00	2SK669	D 608	001-0466-01	S5688G	C 206	178-5612-78	50V 560PF
Q 102	102-2712-51	2SC2712GL	D 609	001-0466-01	S5688G	C 207	178-4742-78	25V 0.47 μ F
Q 103	102-2712-51	2SC2712GL	D 610	001-0516-00	MA111	C 208	178-8212-78	50V 820PF
Q 104	102-2712-51	2SC2712GL	D 801	001-0330-00	1SS119	C 209	178-6812-78	50V 680PF
Q 105	125-2004-02	RN1402	D 901	001-0330-00	1SS119	C 210	178-2232-78	25V 0.022 μ F
Q 106	103-1306-00	2SD1306	L 101	010-4007-00	AM-COIL	C 211	176-1007-00	50V 10PF
Q 201	125-2004-02	RN1402	L 102	010-2230-14	2.2 μ H	C 212	178-2232-78	25V 0.022 μ F
Q 202	125-0002-02	RN2402	L 103	010-2230-31	56 μ H	C 213	178-1032-78	25V 0.01 μ F
Q 203	125-2004-02	RN1402	L 104	010-2230-38	220 μ H	C 214	178-4742-78	25V 0.47 μ F
Q 301	102-2712-51	2SC2712GL	L 105	010-2230-38	220 μ H	C 215	178-4742-78	25V 0.47 μ F
Q 303	125-2004-02	RN1402	L 201	010-2230-38	220 μ H	C 302	172-1031-10	50V 0.01 μ F
Q 304	102-2712-51	2SC2712GL	L 501	009-9006-50	CHOKe	C 303	172-3341-10	50V 0.33 μ F
Q 305	101-1237-00	2SB1237	L 701	010-2230-26	22 μ H	C 305	182-1063-33	16V 10 μ F
Q 306	125-0002-02	RN2402	L 801	010-2230-38	220 μ H	C 306	178-1022-78	50V 1000PF
Q 307	125-0002-02	RN2402	X 201	061-3013-00	4.332MHz	C 310	183-1063-32	16V 10 μ F
Q 308	101-1243-00	2SB1243	X 801	061-1064-00	4.5MHz	C 311	178-1042-78	25V 0.1 μ F
Q 309	125-2004-02	RN1402	C 101	176-1801-00	50V 18PF	C 401	183-1073-22	10V 100 μ F
Q 310	103-1858-00	2SD1858	C 102	176-1007-00	50V 10PF	C 402	183-1063-52	35V 10 μ F
Q 401	103-1858-00	2SD1858	C 103	178-1032-78	25V 0.01 μ F	C 403	183-1073-22	10V 100 μ F
Q 402	125-0002-02	RN2402	C 104	178-1032-78	25V 0.01 μ F	C 404	182-1063-53	35V 10 μ F
Q 403	125-2004-06	RN1406	C 105	178-1022-78	50V 1000PF	C 450	178-1032-78	25V 0.01 μ F
Q 404	125-2004-06	RN1406	C 106	183-1073-22	10V 100 μ F	C 451	178-1032-78	25V 0.01 μ F
Q 405	101-1243-00	2SB1243	C 107	178-1542-78	25V 0.15 μ F	C 501	178-1042-78	25V 0.1 μ F
Q 406	103-2012-00	2SD2012	C 108	183-1073-22	10V 100 μ F	C 502	178-1042-78	25V 0.1 μ F
Q 407	103-1858-00	2SD1858	C 109	178-1032-78	25V 0.01 μ F	C 503	183-1053-62	50V 1 μ F
Q 408	125-2004-02	RN1402	C 110	178-6822-78	50V 6800PF	C 504	183-1053-62	50V 1 μ F
Q 501	125-4001-00	XN1504	C 111	183-1073-22	10V 100 μ F	C 509	182-4763-33	16V 47 μ F
Q 601	125-0002-01	RN2401	C 112	176-1011-00	50V 100PF	C 510	183-1063-52	35V 10 μ F
Q 702	100-1162-00	2SA1162	C 113	176-1011-00	50V 100PF	C 511	183-1063-52	35V 10 μ F
Q 703	125-2004-02	RN1402	C 114	178-4732-78	25V 0.047 μ F	C 514	182-1063-53	35V 10 μ F
Q 901	100-1162-00	2SA1162	C 115	176-1011-00	50V 100PF	C 515	178-1032-78	25V 0.01 μ F
D 201	001-0330-00	1SS119	C 116	178-3312-78	50V 330PF	C 516	178-1022-78	50V 1000PF
D 202	001-0330-00	1SS119	C 117	178-1022-78	50V 1000PF	C 517	178-1022-78	50V 1000PF
D 301	001-0376-41	MTZ7.5JB	C 118	182-1053-63	50V 1 μ F	C 520	178-4712-78	50V 470PF
D 302	001-0376-26	MTZ4.7JB	C 119	182-4753-63	50V 4.7 μ F	C 521	178-4712-78	50V 470PF
D 303	001-0466-01	S5688G	C 120	178-1232-78	25V 0.012 μ F	C 601	172-2231-10	50V 0.022 μ F
D 304	001-0466-01	S5688G	C 121	178-4742-78	25V 0.47 μ F	C 602	042-0047-00	16V 2200 μ F
D 305	001-0330-00	1SS119	C 122	178-3332-78	25V 0.033 μ F	C 603	183-3353-62	50V 3.3 μ F
D 306	001-0330-00	1SS119	C 123	178-5622-78	50V 5600PF	C 604	183-2263-32	16V 22 μ F
D 310	001-0376-47	MTZ9.1JB	C 124	178-2232-78	25V 0.022 μ F	C 605	183-4763-32	16V 47 μ F
D 395	001-0330-00	1SS119	C 125	178-2232-78	25V 0.022 μ F	C 606	182-4746-63	50V 0.47 μ F
D 396	001-0466-01	S5688G	C 126	042-9002-01	50V 3.3 μ F(LN)	C 607	182-4746-63	50V 0.47 μ F
D 401	001-0376-32	MTZ5.6JB	C 127	178-1032-78	25V 0.01 μ F	C 608	182-4746-62	50V 0.47 μ F
D 402	001-0376-47	MTZ9.1JB	C 128	182-4743-63	50V 0.47 μ H	C 609	182-4746-63	50V 0.47 μ F
D 403	001-0516-00	MA111	C 129	176-1011-00	50V 100PF	C 611	172-1041-10	50V 0.1 μ F
D 601	001-0592-00	RM4Z	C 130	183-1073-22	10V 100 μ F	C 612	172-1041-10	50V 0.1 μ F

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C 613	172-1041-10	50V 0.1 μ F	R 302	117-2231-10	1/10W 22K Ω	R 524	111-1031-91	1/4WSS 10K Ω
C 614	172-1041-10	50V 0.1 μ F	R 303	117-2231-10	1/10W 22K Ω	R 602	117-1031-10	1/10W 10K Ω
C 801	176-2201-00	50V 22PF	R 304	111-2231-91	1/4WSS 22K Ω	R 604	117-1231-10	1/10W 12K Ω
C 802	176-2201-00	50V 22PF	R 305	117-2231-10	1/10W 22K Ω	R 605	116-4721-10	1/8W 4.7K Ω
C 803	178-4732-78	25V 0.047 μ F	R 306	117-4721-10	1/10W 4.7K Ω	R 606	111-4721-91	1/4WSS 4.7K Ω
C 804	178-4732-78	25V 0.047 μ F	R 307	117-4721-10	1/10W 4.7K Ω	R 607	111-4721-91	1/4WSS 4.7K Ω
C 805	178-1032-78	25V 0.01 μ F	R 308	111-3321-91	1/4WSS 3.3K Ω	R 608	116-4721-10	1/8W 4.7K Ω
C 806	182-4763-33	16V 47 μ F	R 309	117-1031-10	1/10W 10K Ω	R 609	117-4721-10	1/10W 4.7K Ω
C 807	183-1073-22	10V 100 μ F	R 310	111-5611-81	1/2WS 560 Ω	R 701	117-4721-10	1/10W 4.7K Ω
C 808	178-1032-78	25V 0.01 μ F	R 311	117-1031-10	1/10W 10K Ω	R 702	117-4721-10	1/10W 4.7K Ω
C 809	172-1031-10	50V 0.01 μ F	R 312	117-1031-10	1/10W 10K Ω	R 711	117-4731-10	1/10W 47K Ω
C 810	178-4732-78	25V 0.047 μ F	R 313	117-4721-10	1/10W 4.7K Ω	R 714	117-1031-10	1/10W 10K Ω
C 811	178-1032-78	25V 0.01 μ F	R 314	111-4711-81	1/2WS 470 Ω	R 715	117-2231-10	1/10W 22K Ω
R 101	117-1021-10	1/10W 1K Ω	R 402	117-1041-10	1/10W 100K Ω	R 803	117-1031-10	1/10W 10K Ω
R 102	117-2731-10	1/10W 27K Ω	R 403	117-4731-10	1/10W 47K Ω	R 810	117-2231-10	1/10W 22K Ω
R 103	117-1011-10	1/10W 100 Ω	R 404	111-1041-91	1/4WSS 100K Ω	R 812	117-2221-10	1/10W 2.2K Ω
R 104	117-4721-10	1/10W 4.7K Ω	R 405	117-1041-10	1/10W 100K Ω	R 813	117-2221-10	1/10W 2.2K Ω
R 105	117-2221-10	1/10W 2.2K Ω	R 406	111-4711-91	1/4WSS 470 Ω	R 818	111-4731-91	1/4WSS 47K Ω
R 106	117-1021-10	1/10W 1K Ω	R 407	111-2291-91	1/4WSS 2.2 Ω	R 819	117-1041-10	1/10W 100K Ω
R 107	117-3311-10	1/10W 330 Ω	R 408	111-2291-91	1/4WSS 2.2 Ω	R 820	117-1041-10	1/10W 100K Ω
R 108	117-6821-10	1/10W 6.8K Ω	R 409	111-2211-91	1/4WSS 220 Ω	R 823	117-1031-10	1/10W 10K Ω
R 109	117-1021-10	1/10W 1K Ω	R 410	111-2211-91	1/4WSS 220 Ω	R 824	117-1031-10	1/10W 10K Ω
R 110	117-5631-10	1/10W 56K Ω	R 411	111-1221-91	1/4WSS 1.2K Ω	R 830	117-1031-10	1/10W 10K Ω
R 111	117-5631-10	1/10W 56K Ω	R 412	117-4731-10	1/10W 47K Ω	R 831	117-4731-10	1/10W 47K Ω
R 112	116-3311-10	1/8W 100 Ω	R 413	117-1041-10	1/10W 100K Ω	R 832	117-4731-10	1/10W 47K Ω
R 113	117-6821-10	1/10W 6.8K Ω	R 501	117-4721-10	1/10W 4.7K Ω	R 901	117-1031-10	1/10W 10K Ω
R 114	117-1021-10	1/10W 1K Ω	R 502	117-4721-10	1/10W 4.7K Ω	R 902	117-4721-10	1/10W 4.7K Ω
R 115	117-2221-10	1/10W 2.2K Ω	R 503	117-1021-10	1/10W 1K Ω	R 903	117-4731-10	1/10W 47K Ω
R 116	117-1021-10	1/10W 1K Ω	R 504	117-1021-10	1/10W 1K Ω	SUP101	060-0122-20	DSP-141N
R 201	117-2221-10	1/10W 2.2K Ω	R 505	117-1031-10	1/10W 10K Ω	VR 101	012-4738-13	470K Ω
R 202	117-3321-10	1/10W 3.3K Ω	R 506	117-1031-10	1/10W 10K Ω	CN 101	074-1217-00	OUTLET SOCKET
R 203	117-3331-10	1/10W 33K Ω	R 507	117-3311-10	1/10W 330 Ω	CN 102	074-1115-00	OUTLET SOCKET
R 204	117-1031-10	1/10W 10K Ω	R 508	117-3311-10	1/10W 330 Ω	CN 106	074-0986-26	OUTLET SOCKET
R 205	117-1231-10	1/10W 12K Ω	R 515	111-4721-91	1/4WSS 4.7K Ω	S 301	013-6100-00	SWITCH(RES ET)
R 206	117-1041-10	1/10W 100K Ω	R 516	111-4721-91	1/4WSS 4.7K Ω	FUSE	060-0057-57	15A
R 207	117-2211-10	1/10W 220 Ω	R 517	111-4721-91	1/4WSS 4.7K Ω			
R 301	117-4731-10	1/10W 47K Ω	R 518	111-4721-91	1/4WSS 4.7K Ω			

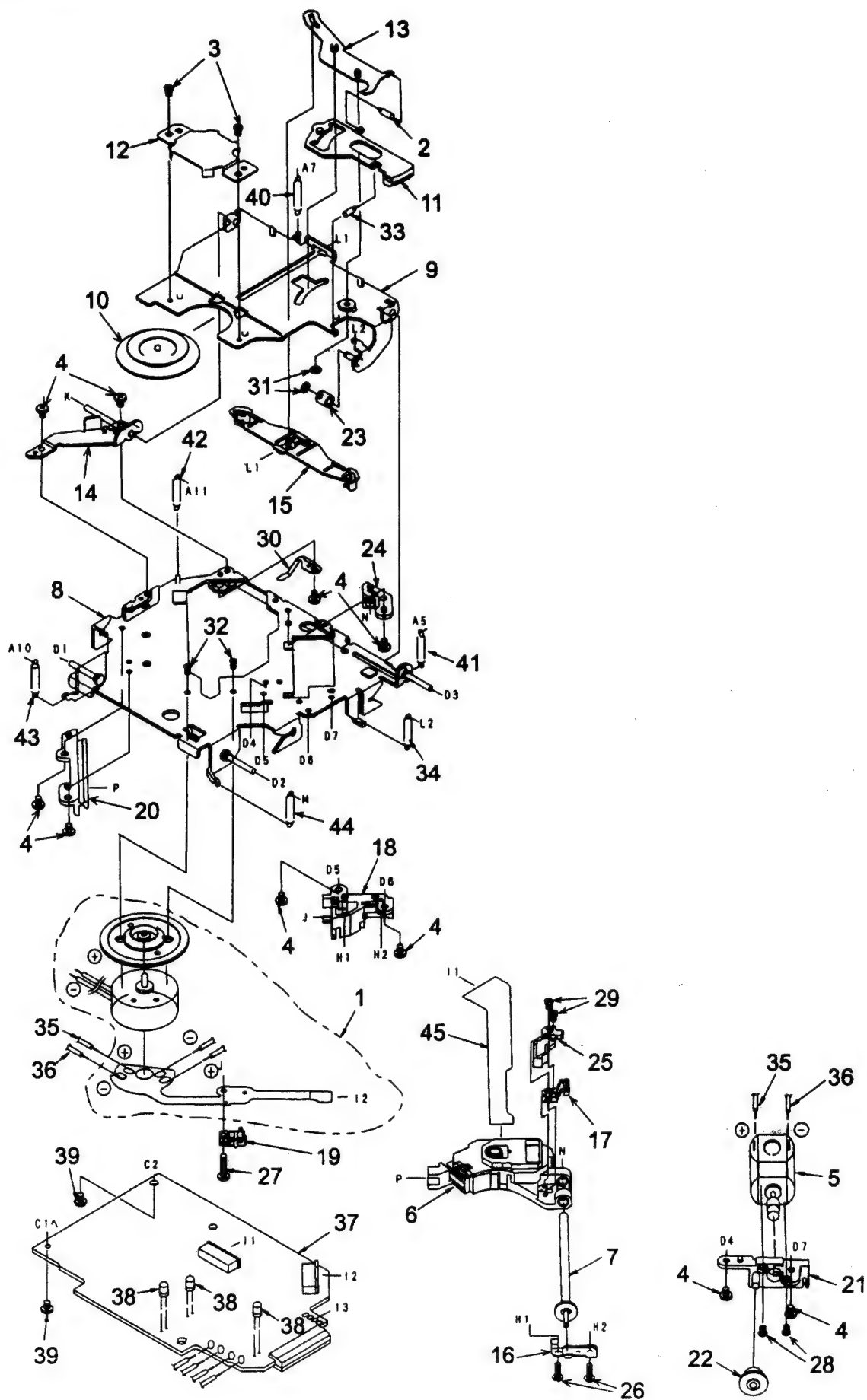
Switch PWB section (B1)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
IC 101	051-6013-00	LC75854W	R 108	117-1241-10	1/10W 120K Ω	S 106	013-6001-50	SKQCAB
Q 101	100-1162-00	2SA1162	R 109	117-1011-10	1/10W 100 Ω	S 107	013-6305-00	SKQMAH
D 101	001-0529-29	MA8051M	R 110	117-1011-10	1/10W 100 Ω	S 108	013-6001-50	SKQCAB
D 102	001-0529-14	MA8030L	R 112	032-0092-80	1/10W 300 Ω 1%	S 109	013-6001-50	SKQCAB
D 103	001-0529-41	MA8075M	R 113	032-0092-80	1/10W 300 Ω 1%	S 110	013-6001-50	SKQCAB
D 104	001-7046-00	NSPW310BS	R 114	117-1021-10	1/10W 1K Ω	S 111	013-6305-00	SKQMAH
C 101	178-4732-78	25V 0.047	CN 101	076-0615-00	PLUG	S 112	013-6001-50	SKQCAB
C 102	178-4732-78	25V 0.047	PL 101	017-0444-00	14V 50mA	S 113	013-6305-00	SKQMAH
C 103	178-1022-78	50V 1000P	PL 102	017-0444-00	14V 50mA	S 114	013-6001-50	SKQCAB
C 104	042-0416-51	6.3V 10 μ F(TAN)	PL 103	017-0444-00	14V 50mA	S 115	013-6001-50	SKQCAB
R 101	117-2221-10	1/10W 2.2K Ω	PL 104	017-0444-00	14V 50mA	S 116	013-6305-00	SKQMAH
R 102	117-2221-10	1/10W 2.2K Ω	PL 105	017-0444-00	14V 50mA	S 117	013-6305-00	SKQMAH
R 103	117-2221-10	1/10W 2.2K Ω	S 101	013-6001-50	SKQCAB	S 118	016-9900-66	SIM-026MT
R 104	117-4731-10	1/10W 47K Ω	S 102	013-6305-00	SKQMAH	S 119	013-6001-50	SKQCAB
R 105	117-1031-10	1/10W 10K Ω	S 103	013-6305-00	SKQMAH	S 120	013-6305-00	SKQMAH
R 106	117-3311-10	1/10W 330 Ω	S 104	013-6001-50	SKQCAB			
R 107	117-3921-10	1/10W 3.9K Ω	S 105	013-6001-50	SKQCAB			

■ EXPLODED VIEW:

CD mechanism section 929-0092-80(BB-CD)

Drive unit section



■ PARTS LIST:

CD mechanism section 929-0092-80(BB-CD)

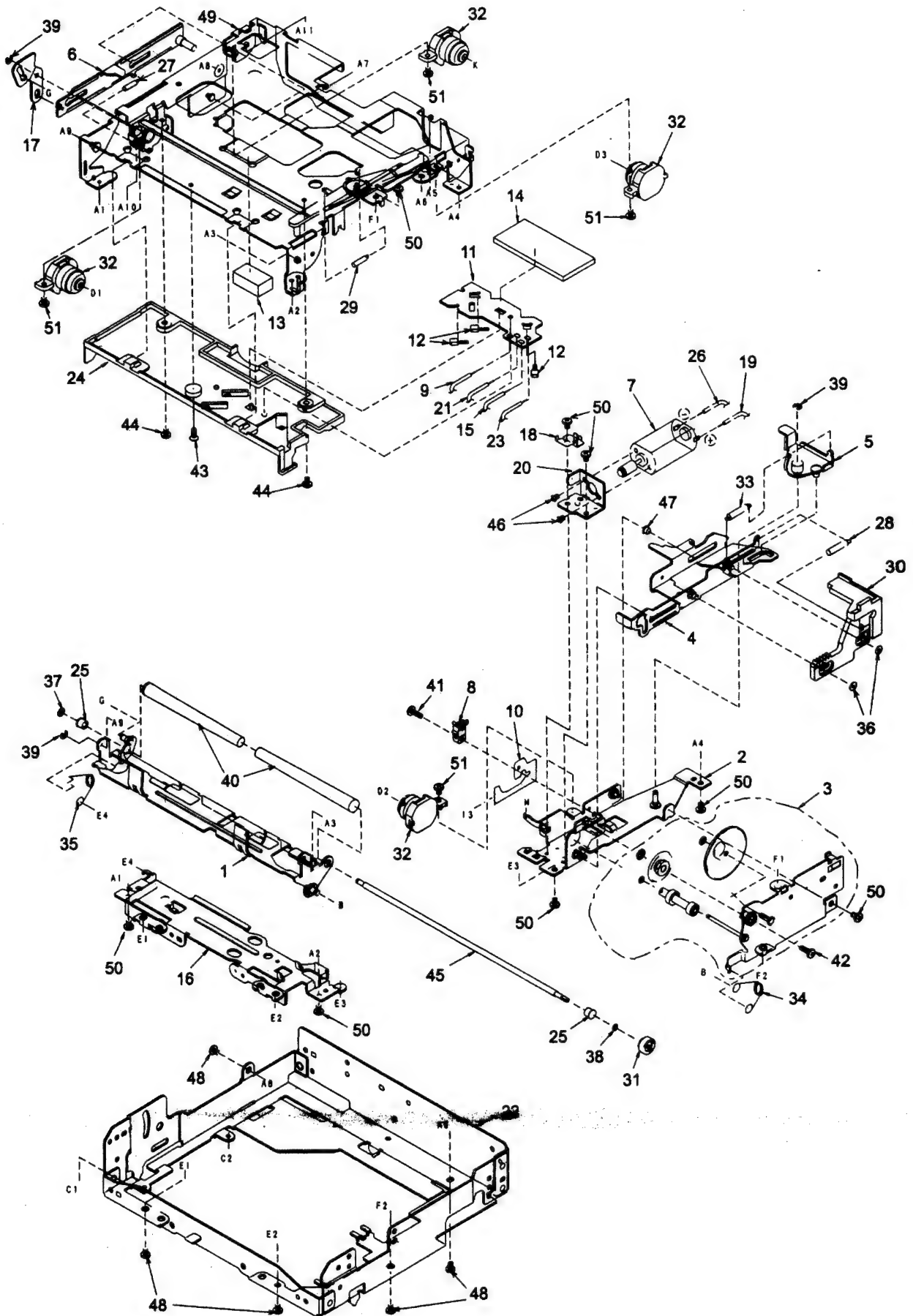
Note) Several different parts of the same reference number are alternative parts.

One of those parts is used in the set.

Drive unit section

NO.	PARTS NO.	DESCRIPTION	QTY	NO.	PARTS NO.	DESCRIPTION	QTY
1	SMA-151-100	MOTOR ASSY (SPINDLE)	1	25	621-0375-00	SH-BASE	1
2	750-3098-00	L-LINK SPRING	1	26	716-0675-00	SCREW (M2×5.5)	2
3	716-1468-00	SCREW (M2×2.5)	2	27	716-1555-00	WAVE SCREW (φ2×8)	1
4	716-2003-81	SCREW (M2×3)	10	28	732-2004-11	SEMS SCREW (M2×4)	2
5	SMA-146-100	MOTOR ASSY (SLED)	1	29	739-1735-17	PRECISION SCREW (M1.7×3.5)	2
6	969-0008-00	PICK UP UNIT	1	30	620-0690-01	RATTLE PLATE	1
7	HBS-432-100	LS-GEAR ASSY	1	31	746-0761-00	WASHER	2
8	966-0447-05	DR-PLATE-ASSY	1	32	716-1733-00	SCREW (M1.7×2.3)	2
9	966-0449-22	CLAMP-LINK-ASSY	1	33	750-3099-00	ES-SPRING	1
10	621-0205-02	CLAMPER RING	1	34	750-3097-03	CLAMPER SPRING	1
11	621-0251-03	LOCK LINK	1	35	816-2373-00	LEAD WIRE (WHT)	1
12	620-0198-03	CLAMPER PLATE	1	36	816-2372-00	LEAD WIRE (BLU)	1
13	966-0314-01	STOP LINK-ASSY	1	37	039-1576-00	CD PWB (WITHOUT COMPONENT)	1
14	966-0448-21	SIDE PLATE-ASSY	1	38	001-0563-00	LED	3
15	621-0252-03	DISC STOPPER	1	39	716-1670-00	SCREW (M2×4)	2
16	620-0491-03	SPRING PLATE	1	40	750-3202-00	CENTER SPRING-B	1
17	966-0454-00	SCREW H-RACK-ASSY	1	41	750-3096-01	DR-SPRING R	1
18	621-0358-02	LS-HOLDER-F	1	42	750-3164-00	DR-SPRING LR	1
19	013-7100-00	SWITCH (LIMIT)	1	43	750-3188-00	DR-SPRING F-B	1
20	621-0357-03	PICK UP GUIDE	1	44	750-3201-00	DR-SPRING F-R	1
21	621-0253-02	MOTOR HOLDER	1	45	039-1587-00	FPC (WITHOUT COMPONENT)	1
22	621-0255-02	SECOND GEAR	1				
23	622-1073-02	CLAMPER ROLLER	1				
24	621-0359-02	LS-HOLDER-R	1				

MECH chassis section



MECH chassis section

NO.	PARTS NO.	DESCRIPTION	QTY
1	966-0309-04	L-DISC-G-ASSY	1
2	966-0310-06	SHIFT-P-CH-ASSY	1
3	HBS-430-100	GEAR PLATE ASSY	1
4	966-0312-06	SHIFT-PLATE-ASSY	1
5	966-0358-01	DRIVE-L-PLATE-ASSY	1
6	966-0359-03	SIDE-L-PLATE-ASSY	1
7	SMA-147-100	MOTOR ASSY (LOADING)	1
8	013-3879-01	CHUCKING SWITCH	1
9	804-4910-60	VINYL-COAT-WIRE (YEL)	1
10	039-0586-01	CHUCKING SWITCH PWB (WITHOUT COMPONENT)	1
11	039-0588-01	SENSOR PWB (WITHOUT COMPONENT)	1
12	060-0252-01	PHOTO-TR	3
13	345-7513-01	CLAMPER SHEET	1
14	345-7514-00	SENSOR PWB SHEET	1
15	802-4910-60	VINYL-COAT-WIRE (RED)	1
16	620-0485-04	FRONT PLATE	1
17	620-0488-01	S-L-LINK PLATE	1
18	620-0489-02	MOTOR PLATE	1
19	802-4904-60	VINYL-COAT-WIRE (RED)	1
20	620-0492-01	MOTOR BRACKET	1
21	801-4910-60	VINYL-COAT-WIRE (BRN)	1
22	620-0773-01	CD-MECH-BRKT	1
23	800-4910-60	VINY-COAT-WIRE (BLK)	1
24	621-0402-01	U-DISC GUIDE-F	1
25	621-0243-02	ROLLER SLEEVE	2

NO.	PARTS NO.	DESCRIPTION	QTY
26	800-4904-60	VINYL-COAT-WIRE (BLK)	1
27	750-3189-00	SIDE-L-SPRING	1
28	750-3098-00	L-LINK SPRING	1
29	750-3094-00	S-ARM SPRING	1
30	621-0248-07	RACK GEAR	1
31	621-0249-02	ROLLER GEAR	1
32	629-0074-00	DAMPER	4
33	750-3092-03	SHIFT SPRING	1
34	750-3091-03	LOADING-SPRING-R	1
35	750-3090-02	LOADING-SPRING-L	1
36	746-0877-02	WASHER	2
37	746-0762-00	WASHER	1
38	746-0712-03	WASHER	1
39	743-1500-10	E-RING	3
40	621-0258-03	LOADING ROLLER	2
41	716-1742-00	SCREW (M2×5)	1
42	716-1704-00	SCREW (M2×7)	1
43	716-1677-00	SCREW (M2×5)	1
44	716-1507-00	SCREW (M2×3)	2
45	622-1072-05	ROLLER SHAFT	1
46	716-1468-00	SCREW (M2×2.5)	2
47	622-1219-01	SHIFT ROLLER	1
48	714-2603-81	SCREW (M2.6×3)	5
49	966-0308-10	CHASSIS ASSY	1
50	714-2003-81	SCREW (M2×3)	8
51	716-1670-00	SCREW (M2×4)	4

■ ELECTRICAL PARTS LIST :

CD mechanism section (B3)

Note) Several different parts of the same reference number are alternative parts.

One of those parts is used in the set.

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
C1	163-1073-10	6.3V 100 μ F	C36	176-6801-00	68pF CH	R8	117-1041-10	1/10W 100K Ω
C3	178-1042-78	0.1 μ F	C37	176-2201-00	22pF CH	R9	117-1031-10	1/10W 10K Ω
C4	178-2222-78	2200pF	C38	178-1042-78	0.1 μ F	R10	117-4731-10	1/10W 47K Ω
C5	178-1042-78	0.1 μ F	C39	163-4763-05	4V 47 μ F	R12	117-4741-10	1/10W 470K Ω
C6	178-1042-78	0.1 μ F	C44	178-2242-78	0.22 μ F	R13	117-3331-10	1/10W 33K Ω
C7	178-1042-78	0.1 μ F	C45	178-2242-78	0.22 μ F	R14	117-3321-10	1/10W 3.3K Ω
C8	176-1501-00	15pF CH	C46	163-4763-10	6.3V 47 μ F	R15	117-1031-10	1/10W 10K Ω
C9	176-1501-00	15pF CH	C47	178-8222-78	8200pF	R16	117-3321-10	1/10W 3.3K Ω
C10	176-1201-00	12pF CH	C48	178-1042-78	0.1 μ F	R17	117-3321-10	1/10W 3.3K Ω
C11	178-1042-78	0.1 μ F	C50	163-1073-10	6.3V 100 μ F	R18	117-3321-10	1/10W 3.3K Ω
C13	178-1042-78	0.1 μ F	C51	178-1042-78	0.1 μ F	R19	117-3321-10	1/10W 3.3K Ω
C14	178-1042-78	0.1 μ F	C52	178-2232-78	0.022 μ F	R20	117-3321-10	1/10W 3.3K Ω
C15	178-1042-78	0.1 μ F	C54	176-2201-00	22pF CH	R21	117-2221-10	1/10W 2.2K Ω
C16	178-1042-78	0.1 μ F	C61	178-1042-78	0.1 μ F	R22	117-8211-10	1/10W 820K Ω
C17	163-1073-31	16V 100 μ F	C63	178-1042-78	0.1 μ F	R23	117-9131-10	1/10W 91K Ω
C18	176-4701-00	47pF CH	C64	178-1042-78	0.1 μ F	R24	117-1041-10	1/10W 100K Ω
C19	178-1532-78	0.015 μ F	C65	178-1042-78	0.1 μ F	R25	117-1041-10	1/10W 100K Ω
C20	178-1032-78	0.01 μ F	D4	001-0516-00	MA111	R26	117-1841-10	1/10W 180K Ω
C21	178-2722-78	2700pF	IC1	051-5704-00	TA2096FN	R27	117-1841-10	1/10W 180K Ω
C22	178-4722-78	4700pF	IC2	051-6342-00	TC9462F	R28	117-2211-10	1/10W 220 Ω
C23	178-1042-78	0.1 μ F	IC3	051-6045-08	BA5984FP	R29	117-2201-10	1/10W 22 Ω
C24	178-1042-78	0.1 μ F	J1	074-1138-66	16P	R30	117-1041-10	1/10W 100K Ω
C25	178-1042-78	0.1 μ F	J2	074-1138-06	6P	R31	117-1041-10	1/10W 100K Ω
C26	178-4712-78	470pF	L1	010-2155-93	10 μ H	R32	117-1041-10	1/10W 100K Ω
C27	178-4712-78	470pF	L3	010-2199-74	10 μ H J	R33	117-1041-10	1/10W 100K Ω
C28	178-4732-78	0.047 μ F	Q1	101-1188-50	2SB1188PQR	R34	117-1041-10	1/10W 100K Ω
C29	178-4732-78	0.047 μ F	R1	117-2211-10	1/10W 220 Ω	R35	117-2241-10	1/10W 220K Ω
C30	178-4732-78	0.047 μ F	R2	117-2211-10	1/10W 220 Ω	R36	117-1041-10	1/10W 100K Ω
C31	178-4732-78	0.047 μ F	R3	117-5611-10	1/10W 560 Ω	R37	117-1041-10	1/10W 100K Ω
C32	163-4763-05	4V 47 μ F	R4	117-5611-10	1/10W 560 Ω	R38	117-8231-10	1/10W 82K Ω
C33	163-4763-05	4V 47 μ F	R5	117-4711-10	1/10W 470 Ω	R39	117-1841-10	1/10W 180K Ω
C34	176-1801-00	18pF CH	R6	117-3311-10	1/10W 330 Ω	X1	061-3500-90	16.920MHz
C35	176-6097-00	6pF CH	R7	117-4721-10	1/10W 4.7K Ω			

Sensor PWB section (B4)

REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION	REF No.	PART No.	DESCRIPTION
Q101	060-0252-01	PT4850F	Q102	060-0252-01	PT4850F	Q103	060-0252-01	PT4850F

Chuckling SW PWB section (B5)

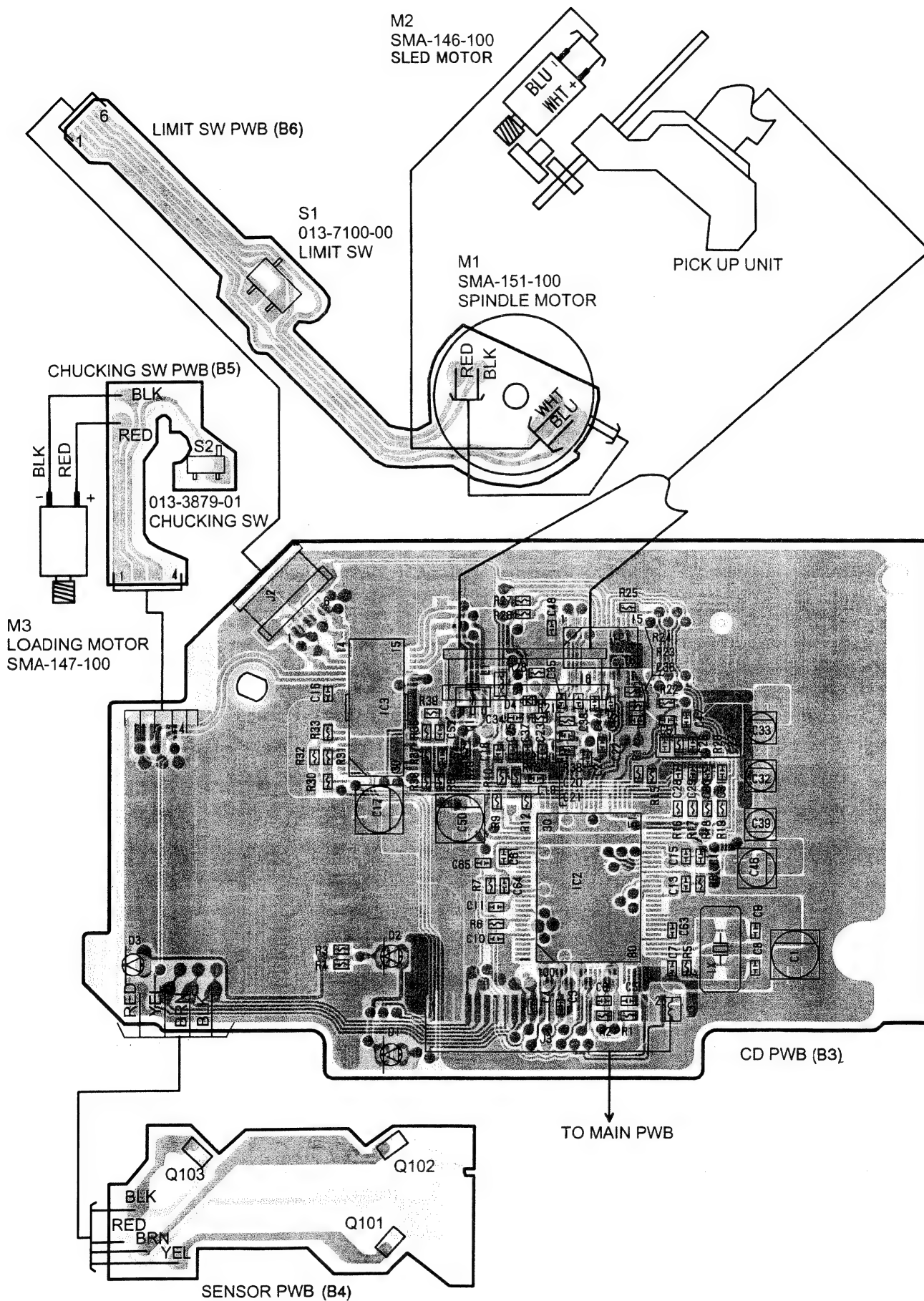
REF No.	PART No.	DESCRIPTION
S2	013-3879-01	SPPB12

Limit SW PWB section (B6)

REF No.	PART No.	DESCRIPTION
S1	013-7100-00	SPPB11

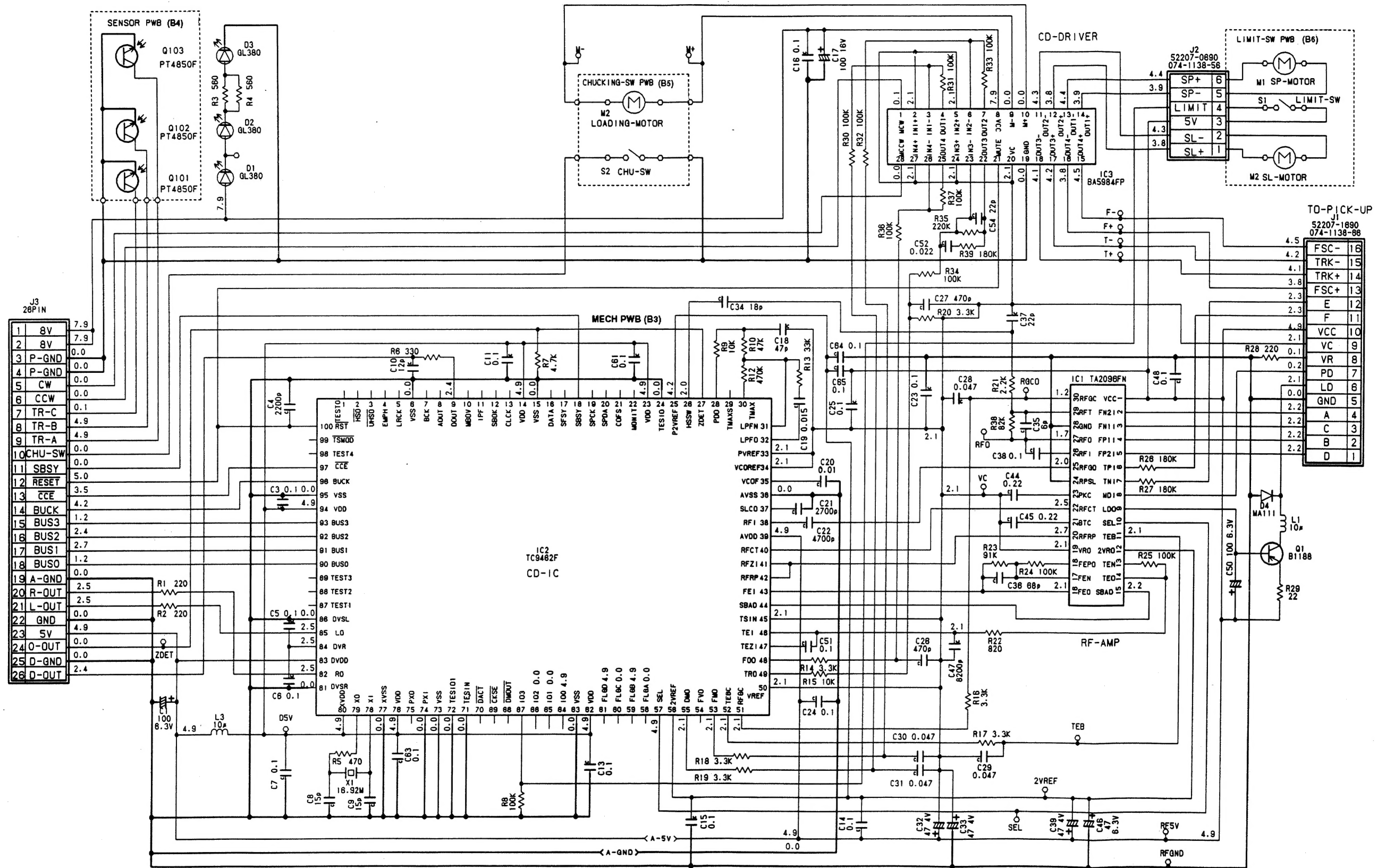
■ PRINTED WIRING BOARD:

CD mechanism section 929-0092-80(BB-CD)

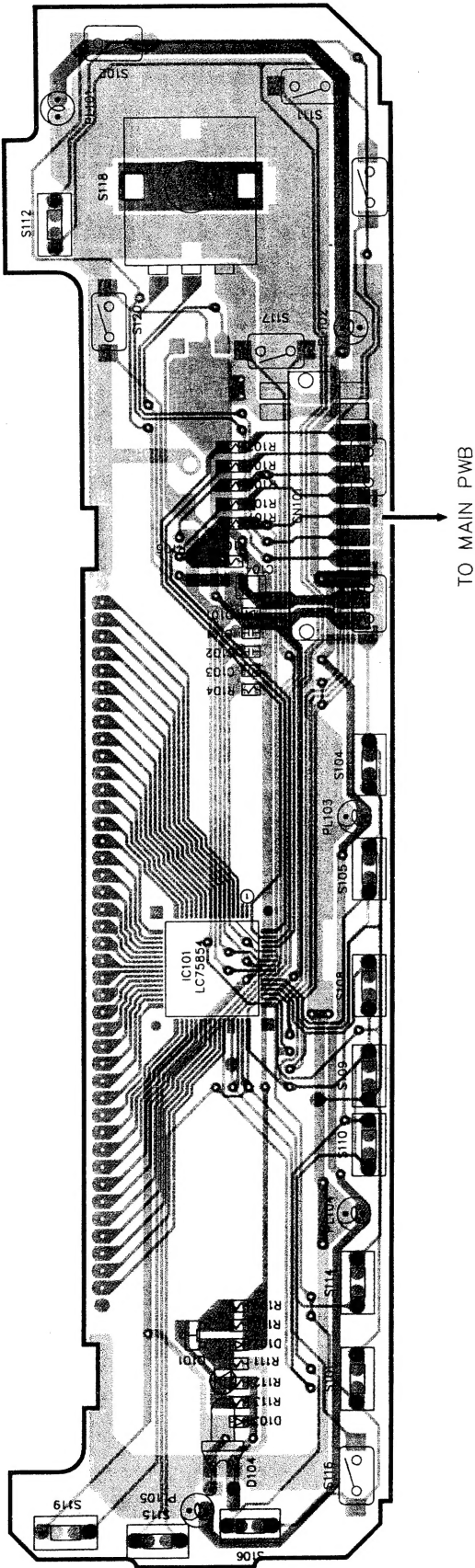


■ CIRCUIT DIAGRAM:

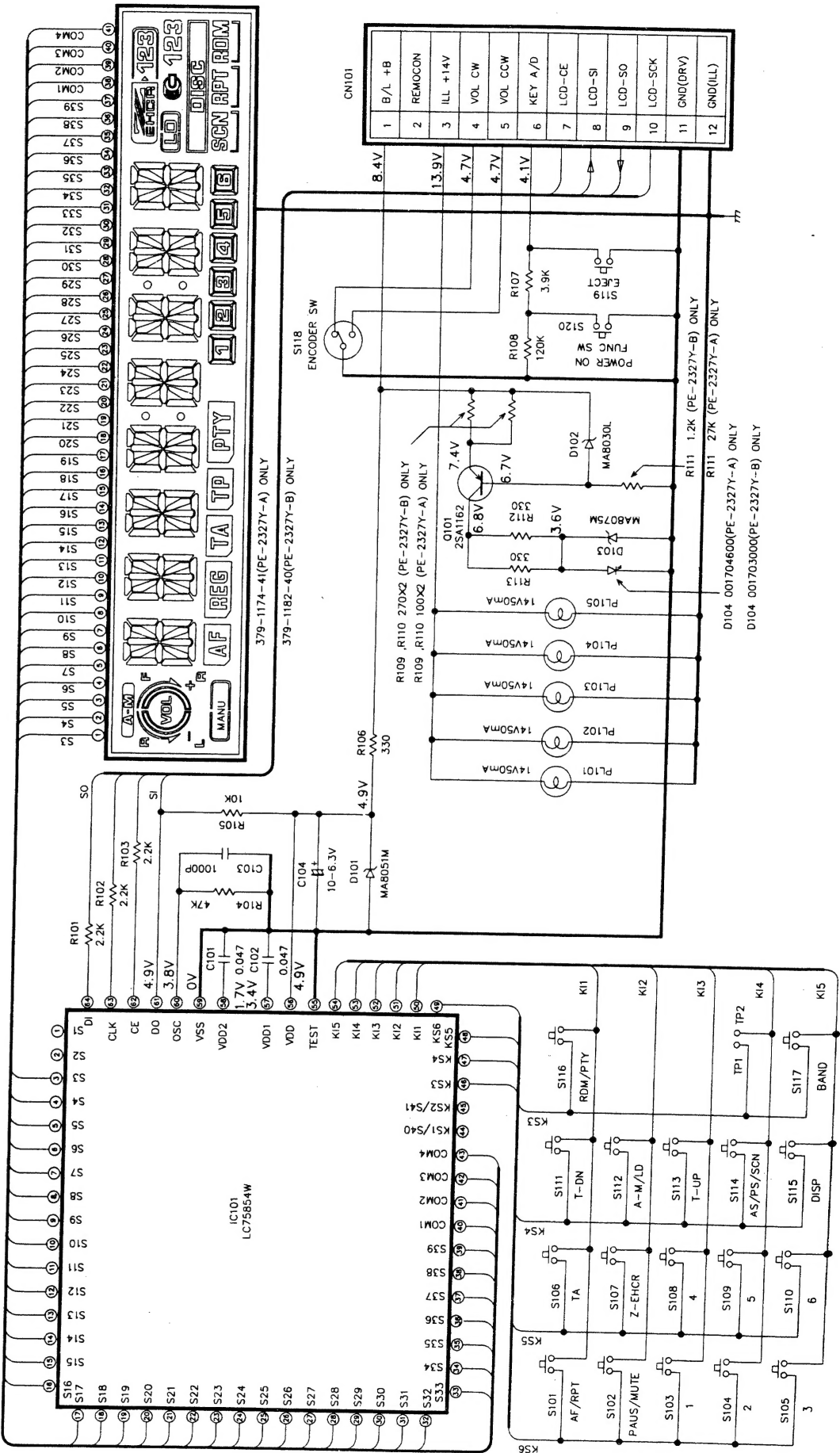
CD mechanism section 929-0092-80(BB-CD)



Switch PWB (B1) section



Switch PWB (B1) section



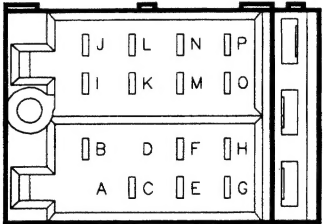
■ PRINTED WIRING BOARD:
Main PWB (B2) section

855-5426-52
RCA LINE OUT BLACK LEFT/REAR(WHITE)
RIGHT/REAR(RED)

© TO MAIN PWB

⑥ TO MAIN PWB

16P OUTLET SOCKET



CONNECTOR

PIN NO.	DESCRIPTION
A	
B	PHONE MUTE
C	BACK UP
D	
E	
F	AUTO. ANT
G	GND
H	ACC
I	SP-RR ⊖
J	SP-RR ⊕
K	SP-FR ⊖
L	SP-FR ⊕
M	SP-FL ⊖
N	SP-FL ⊕
O	SP-RL ⊖
P	SP-RL ⊕

092-9000-41

TO CD MECHANISM

TO SW PWB

■ CIRCUIT DIAGRAM:

Main PWB (B2) section

